

REMARKS

In the Official Action dated June 16, 2006, the Examiner withdrew the prior rejection of the claims over the cited art and issued new grounds for rejection of the pending claims. Specifically, claims 1-13 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Additionally, claims 1-23 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner objected to claim 1 due to a typographical error wherein the word “whereby” was split into two words. Finally, the Applicants acknowledge with appreciation the Examiner’s indication of allowable subject matter in claims 14-23.

Brief Description of the Current Invention

Prior to discussing the specific elements of the § 112 rejections of the pending claims, the Applicants believe the following review of the invention as described in the specification will advance the application to allowance.

Turning first to page 5, lines 16-22, the Applicants note that Figure 1 provides a perspective view of the burner tile 28. As depicted therein, burner tile 28 is divided into a plurality of sections, 36 and 38, with alternating sections having different heights and slanting at different angles. Continuing on page 5, lines 23-26, Figure 4 demonstrates that sections 36 have short heights and slant towards the opening 32 at large angles in contrast to sections 38 which have taller heights and slant to opening 32 at smaller angles. Thus, it is clear that alternating sections 36 and 38 have different angles directed toward the center opening 32 of burner tile 28. Further, from a review of FIGS. 1 and 3 it is apparent that in the preferred embodiment only sections 36 include fuel passageways 42 adjacent to fuel nozzles 54.

Page 7, lines 9-30 provides an explanation of the delivery of fuel through nozzles 54 with regard to sections 36 and 38. This explanation is provided in conjunction with the depictions of Figures 2 and 3. As described at page 7, in the preferred embodiment nozzles 54 are provided adjacent to each section 36 and 38. As noted page 7, lines 9-17, nozzles 54 positioned adjacent

to sections 36 and 38 include fuel discharge openings which provide secondary fuel gas in a fan shaped manner substantially parallel and adjacent to the exterior surfaces of sections 36 and 38. Further, as indicated at page 7, lines 18-26, nozzles 54 adjacent to sections 36 are also provided with fuel gas discharge openings which direct fuel into primary fuel gas passageways 42 formed within sections 36. Thus, as described at page 7, lines 20-22, nozzles 54 adjacent to sections 36 discharge both secondary fuel gas parallel to the surface of sections 36 and primary fuel gas into openings 42 found within section 36. Accordingly, as discussed in page 7 and depicted in Figures 1, 3 and 4, every other section, 36 and 38, of burner tile 28 is slanted at a first angle and a second angle respectively towards opening 32 of burner tile 28.

As noted at page 5, lines 24-26, sections 36 have short heights and slant towards opening 32 at large angles and contain primary fuel gas passageways 42. Referring again to page 5, sections 38 have taller heights and slant toward the opening at smaller angles. Further, as depicted in Figures 1, 3 and 4, sections 38 do not contain a primary fuel gas passageway 42. Thus, sections 38 are slanted at a second angle and do not have a fuel gas passageway therein.

35 U.S.C. § 112, First Paragraph Rejection of Claims 1-13

The Examiner has rejected pending claims 1-13 under § 112, first paragraph, on the grounds that the following claims limitation “said sections slanted at a second angle do not have a fuel gas passageway therein” is not found in the original specification. The Applicants respectfully traverse this rejection and request reconsideration thereof.

Support for the phrase in question is clearly found within the specification as originally filed in Figures 1, 3 and 4. Further, sections 36, which contain passageways 42, are clearly described as slanting toward opening 32 at larger angles than sections 38 which do not contain a fuel gas passageway. See page 5, lines 23-26 and page 6, lines 14-20. The exact language “primary fuel gas passageways” is found on page 2, lines 30-31. Therefore, the Applicants respectfully submit that claims 1-13 are fully supported by the specification and satisfy the written description requirement of 35 U.S.C. § 112, first paragraph. Accordingly, the Applicants respectfully request reconsideration and withdrawal of this rejection of the pending claims.

35 U.S.C. § 112, Second Paragraph Rejection of Claims 1-23

Claim 1 has been rejected under 35 U.S.C. §112, second paragraph because the phrase “said source of fuel” in the last paragraph of claim 1 lacks antecedent basis.” The Applicants have amended claim 1 by replacing the word “said” with the word “a”.

The Examiner also rejected claims 1 and 14 under § 112, second paragraph on the basis that the phrase “said slanted section” found in the last paragraph of each claim lacks antecedent basis. The Applicants have now amended claims 1 and 14 to more clearly indicate that the nozzles adjacent to the sections slanted at a first angle provide both primary fuel gas into the primary fuel gas passageway and secondary fuel gas which passes along the external slanted wall of each section slanted at a first angle. Support for these amendments are found in the specification in the sections discussed above.

Finally, the Examiner has rejected claims 1 and 14 under § 12, second paragraph asserting that the claims are vague, indefinite and confusing. The Examiner has identified the following portions of the claims as contributing to the indefiniteness of the claims: “said section slanted at a second angle do not have fuel gas passageway therein” which the Examiner asserts conflicts with the recitation that “a plurality of fuel gas nozzles connected to said fuel source of fuel gas and positioned outside each section of said wall of said burner tile”.

The Applicants respectfully submit that in view of the foregoing discussion, the claims are not vague, indefinite or confusing. Rather, based on the above, and with consideration of Figures 1, 3 and 4 it is apparent that in the preferred embodiment every section has a fuel nozzle. Those sections 36 which contain a primary fuel gas passageway utilize fuel gas nozzles which direct primary fuel gas into the passageway and secondary fuel gas along the surface of the section. Likewise, each section 38 is provided with a fuel gas nozzle which directs fuel gas i.e. secondary fuel gas along the external slanted wall of section 38. Thus, in the preferred embodiment every section is provided with a fuel gas nozzle which discharges secondary fuel gas along the external surface of the section. Additionally every other section in the preferred

embodiment contains a primary fuel gas passageway 42 which receives primary fuel gas from the nozzle and directs it to the interior of the tile 28.

In view of the foregoing discussion of claims 1 and 14, the Applicants respectfully request reconsideration and withdrawal of the rejections of these claims.

The Applicants appreciate and acknowledge the indication of allowable subject matter within claims 14-23. Further, with regard to the objection to claim 1 resulting from the inadvertent separation of the word “whereby”, the Applicants have deleted the word from the claim.

New Claim 24 has been added to the pending claims. New claim 24 is supported by original claim 1 and the specification at page 7, lines 18-30 and page 9, lines 13-16. The Applicants believe that claim 24 is distinguishable over the art of record and provides a clear description of the claimed invention. The Applicants respectfully request entry and allowance of claim 24.

CONCLUSION

The Applicants have amended the claims to overcome the objections and the rejection under 35 U.S.C. § 112, second paragraph. Further, the Applicants have discussed in detail the preferred embodiment of the current invention as described within the specification. The Applicants respectfully submit that the foregoing discussion demonstrates that the specification clearly supports claims 1-13. Therefore, the Applicants request that the rejection of claims 1-13 under § 112, first paragraph be withdrawn. Finally, the Applicants respectfully submit that the foregoing discussion sufficiently clarifies the language used in claims 1 and 14 such that the rejection of claims 1 and 14 under 35 U.S.C. § 112, second paragraph should be withdrawn. Accordingly, in view of the foregoing discussion and amendments to the claims, the Applicants respectfully request reconsideration and withdrawal of the foregoing rejections. A formal Notice of Allowance of Claims 1-24 is earnestly solicited. Should the Examiner care to discuss any

aspect of the foregoing response in greater detail, the undersigned attorney would welcome a telephone call.

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Date

Respectfully submitted,



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